Application No. 10/652,498

Amendment dated August 7, 2006

Reply to Office Action dated April 7, 2006

REMARKS

Summary of the Office Action

Claims 1-3, 8-20 are pending in this application.

Claims 1-3, 8 and 9 have been rejected as obvious over U.S. Patent No. 6,120,534 to Ruiz ("Ruiz") in view of European Patent No. 0 779 062 to Glastra et al. (Glastra").

Claims 1-3, 8, 9, and 13-15 have been rejected as obvious over Glastra in view of German Patent No. 195 09 464 to Jäger ("Jäger").

Claims 10-12, and 16-20 have been rejected as obvious over Glastra in view of Jäger and further in view of U.S. Patent No. 5,695,498 to Tower ("Tower").

Applicant's Response

Applicant has amended independent claim 1 to patentably distinguish the present invention over the prior art of record. In particular, independent claim 1 has been amended to recite that the stent-catheter arrangement includes a stent that has an essentially tubular section in the contracted state and that is deployed by a preformed balloon to achieve a shape that tapers with a predetermined angle and for a predetermined length in a central section to provide a segment of reduced diameter. The stent is coated with an impermeable material, to channel a bodily fluid and force it to increase speed by flowing through the reduced diameter segment. Support for these recitations is provided, e.g., in FIGS. 1-3 and in paragraphs [0003], [0007], and [0022].

The combination of Ruiz and Glastra does not teach, disclose or suggest the claimed invention. Ruiz is directed to a

stent formed to a continuously curved profile that gradually transitions to a choke point. See, e.g., Ruiz, FIGS. 1A-1B and 2A-2B, and claim 1, describing the continuously curved profile and choke point. The stent in Ruiz may be preformed and deployed to assume enlarged semi-spherical ends by using a two spherical balloons, or a single conical end using a conical balloon. See, e.g., Ruiz, FIGS. 2A and 3, and FIGS. 5C-5C. On the contrary, applicant's invention includes the use of a single balloon shaped like a double funnel to deploy the stent to a shape having a segment of narrower diameter, two opposing tapered sections, and end sections of a larger diameter.

Glastra instead teaches the use of a balloon with a central narrower section to expand a vessel constricted by a tumor. Glastra does not teach or suggest a balloon having tapered sections of predetermined lengths and angles nor a stent produced therein having terminal sections that extend from the tapered sections and that have larger, constant cross-sections. See, e.g. Glastra, FIG. 6 (showing the balloon to have bulbous ends) and FIG. 7 (showing the stent having the tapered ends as terminal ends).

Therefore, neither Ruiz nor Glastra, alone or in combination, teach or suggest the claimed structure.

The combination of Glastra and Jäger also does not teach or suggest the claimed invention. The Examiner has admitted that Glastra alone does not teach the claimed structure. Jäger is directed at a stent that has a constriction in the central portion of the stent, contrary to Applicant's invention, and that is not expandable because locally choked. See, e.g., Jäger, col. 4, l. 6-10. Therefore, neither Glastra

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nor Jäger, alone or in combination, teach a stent-catheter arrangement like the claimed structure.

The combination of Glastra, Jäger and Tower also does not teach nor suggest the claimed invention. Glastra and Jäger have been discussed above. Tower is directed to a balloon that, contrary to applicant's invention, inflates at the terminal sections first to retain the stent in position, and then uniformly to fully deploy the stent. See, e.g., Tower, col. 2, 11. 3-14. Therefore, neither Glastra, Jäger, nor Tower, alone or in combination, teach or suggest a stent-catheter arrangement like the claimed structure.

Applicant respectfully submits that claim 1, as now amended, is not anticipated by the prior art of record. Withdrawal of the rejection of claim 1 is respectfully requested. Moreover, Applicant believes that dependent claims 2-3, 8, 10, 13, and 16 are also allowable over the prior art of record because they depend from independent claim 1, and therefore for the reasons stated above.

Applicant has canceled claims 9, 11-12,14-15, and 17-20 and submits herewith new claims 21-24, which are directed to additional features of the inventive stent-catheter arrangement. The new claims are fully supported in the specification, e.g., in paragraphs [0010]-[0012].

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CONCLUSION

In view of the foregoing amendment and comments,

Applicant respectfully submits that the application is now in

condition for allowance. Reexamination and reconsideration of

the pending claims are respectfully requested.

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Respectfully submitted,

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